

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A method of connecting a plurality of hubs and a plurality of terminals with lines, each of the terminals comprising a plurality of ports each of which is connected to one of the lines, comprising:

connecting a first port and a first hub of the hubs with one of the lines at each of the terminals;

connecting a second port of the same terminal with a second hub of the hubs at each of the terminals;

activating one of the lines connected with each of the terminals;

circularly connecting the hubs with each other; and

inactivating one of lines between adjoining two hubs.

2. (previously presented): The method claimed in clam 1, further comprising:

detecting a fault on the first port of a terminal connected with the activated line;

inactivating the first port; and

activating the second port of the same terminal.

3. (previously presented): The method claimed in claim 2, further comprising informing other terminals that the terminal inactivated the first port of the terminal and activated the second port of the same terminal.

4. (original): The method claimed in claim 1, wherein the hubs are stackable hubs.

5. (previously presented): The method claimed in claim 1, further comprising:
partitioning the hubs into a plurality of groups, each of which comprises at least one of the hubs; and
supplying power to each of the groups from a different power source.

6. (previously presented): The method claimed in claim 5, wherein the hub which is connected to the first port of the terminal and the hub which is connected to the second port of the same terminal belong to different one of the groups from each other.

7. (original): A network comprising a plurality of hubs and a plurality of terminals,
wherein:

each of the terminals comprises a plurality of ports each of which is connected to different one of the hubs via a line;

one of the lines connected to one of the terminals is active and the rest of the lines connected to the same terminal is inactive;

the hubs are circularly connected with each other; and
one of lines between adjoining two of the hubs is inactive.

8. (previously presented): The network claimed in claim 7, each of the terminals comprising:

means for detecting a fault on the port connected to the active line;

means for inactivating the active line; and

means for activating one of the inactive lines that connects one of the terminals to one of the hubs.

9. (original): The network claimed in claim 8, each of the terminals further comprising means for informing the other terminals of inactivating the active line and activating one of the inactive lines.

10. (previously presented): The network claimed in claim 7, wherein the hubs are stackable hubs, and the top hub is connected with the bottom hub to circularly connect the hubs with each other.

11. (previously presented): The network claimed in claim 7, wherein:
the hubs are partitioned into a plurality of groups each of which comprises at least one of the hubs; and

each of the groups is supplied with power from different power sources.

12. (original): The network claimed in claim 11, wherein at each of the terminals, at least one of the ports is connected to the hub that is partitioned into different group from the rest of the ports.

13. (previously presented): The method claimed in claim 1, wherein the inactivating one of lines between adjoining two hubs forms a cascade connection of the plurality of hubs and wherein the cascade connection logically forms a single hub composed of the plurality of hubs.

14. (previously presented): The method according to claim 13, wherein the plurality of hubs is configured for unicast and broadcast communications.

15. (previously presented): The method according to claim 1, wherein when the plurality of hubs detect that one of the activated lines is unavailable, the plurality of hubs activate the inactive line.

16. (new): The method according to claim 1, wherein the hubs are physically connected only with each other forming a circular cluster and wherein the hubs are logical connected only with each other forming a linear configuration.